



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/700,461

11/05/2003

Yoriko Yagi

YMOR: 297

6397

27890 7590 06/30/2008
STEPTOE & JOHNSON LLP
1330 CONNECTICUT AVENUE, N.W.
WASHINGTON, DC 20036

EXAMINER

SHIBRU, HELEN

ART UNIT

PAPER NUMBER

2621

MAIL DATE

DELIVERY MODE

06/30/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/700,461	Applicant(s) YAGI ET AL.	
	Examiner HELEN SHIBRU	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-16 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-5, drawn to an audio-video multiplexed data generating apparatus that multiplexes audio and video data together comprising "...;a video data storage for storing the video data encoded by the video encoder; a spare-video encoder for encoding video data at a frame rate different from the frame rate of said video encoder; a spare-video-data storage for storing the video data encoded by said spare-video encoder; a synchronization information generator for generating synchronization information for synchronizing the audio data and the video data when multiplexed data is reproduced; a synchronization information storage for storing the synchronization information generated by said synchronization information generator; and an audio-video multiplexer for multiplexing the audio data stored in said audio data storage, the video data stored in said video data storage, the spare video data stored in said spare-video-data storage, and the synchronization information generated by said synchronization information generator", classified in class 386, subclass 34.
 - II. Claims 6-9, drawn to an audio-video multiplexed data reproducing apparatus that demultiplexes multiplexed audio-video data comprising, "a video data storage for storing video data demultiplexed by said audio-video demultiplexer; a spare-video-data storage for storing the spare video data demultiplexed by said audio-

video demultiplexer; a synchronization information storage for storing the synchronization information demultiplexed by said audio-video demultiplexer; an audio decoder for decoding said audio data; a video selector for selecting either said video data or said spare-video-data to be decoded; a video decoder for decoding the video data selected by said video selector; and a synchronization controller for controlling said audio decoder, said video selector, and said video decoder according to said synchronization information to reproduce the multiplexed data”, classified in class 386, subclass 12.

- III. Claims 10-15, drawn to a moving video decoding apparatus that decodes moving video data, comprising; “a video-decoding-determining module for determining whether or not video decoding is completed within a predetermined time; ...; a color converter for performing color conversion of the decoded data outputted from said video decoder; and a video display for displaying the color-converted data outputted from said color converter; wherein said video decoder omits video decoding according to a predetermined rule to reduce the amount of processing depending on the determination made in said video-decoding-determining module”, classified in class 375, subclass 240.24.
- IV. Claim 16, drawn to an audio-video multiplexed data generating and reproducing system that encodes audio data and video data, multiplexes the audio and video data together to generate audio-video multiplexed data, and reproduces the audio-video multiplexed data, comprising “...;if decoding by said video decoder is not complete in time, decoding by said video decoder the spare video data instead of

said demultiplexed video data; and when the decoding by said video decoder is completed within a predetermined time, decoding said demultiplexed video data instead of said spare data by said video decoder to restore the original frame rate of moving video reproduction”, classified in class 375, subclass 25.

2. The inventions are distinct, each from the other because of the following reasons:

Groups I-IV are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the audio-video multiplexed data generating apparatus as claimed in claim 1 does not require the features of, “a video data storage for storing video data demultiplexed by said audio-video demultiplexer; a spare-video-data storage for storing the spare video data demultiplexed by said audio-video demultiplexer; a synchronization information storage for storing the synchronization information demultiplexed by said audio-video demultiplexer; an audio decoder for decoding said audio data; a video selector for selecting either said video data or said spare-video-data to be decoded; a video decoder for decoding the video data selected by said video selector; and a synchronization controller for controlling said audio decoder, said video selector, and said video decoder according to said synchronization information to reproduce the multiplexed data” as claimed in claim 6 of group II, “a video-decoding-determining module for determining whether or not video decoding is completed within a predetermined time; a color converter for performing color conversion of the decoded data outputted from said video decoder; and a video display for displaying the color-converted data outputted from said color converter; wherein said video

decoder omits video decoding according to a predetermined rule to reduce the amount of processing depending on the determination made in said video-decoding-determining module” as claimed in claim 10 of group III, and “if decoding by said video decoder is not complete in time, decoding by said video decoder the spare video data instead of said demultiplexed video data; and when the decoding by said video decoder is completed within a predetermined time, decoding said demultiplexed video data instead of said spare data by said video decoder to restore the original frame rate of moving video reproduction” as claimed in claim 16 of group IV.

Similarly, the an audio-video multiplexed data reproducing apparatus as claimed in claim 6 of group II does not require the features of “a video data storage for storing the video data encoded by the video encoder; a spare-video encoder for encoding video data at a frame rate different from the frame rate of said video encoder; a spare-video-data storage for storing the video data encoded by said spare-video encoder; a synchronization information generator for generating synchronization information for synchronizing the audio data and the video data when multiplexed data is reproduced; a synchronization information storage for storing the synchronization information generated by said synchronization information generator; and an audio-video multiplexer for multiplexing the audio data stored in said audio data storage, the video data stored in said video data storage, the spare video data stored in said spare-video-data storage, and the synchronization information generated by said synchronization information generator” as claimed in claim 1 of group I, “a video-decoding-determining module for determining whether or not video decoding is completed within a predetermined time; a color converter for performing color conversion of the decoded data outputted from said video

decoder; and a video display for displaying the color-converted data outputted from said color converter; wherein said video decoder omits video decoding according to a predetermined rule to reduce the amount of processing depending on the determination made in said video-decoding-determining module” as claimed in claim 10 of group III, and “if decoding by said video decoder is not complete in time, decoding by said video decoder the spare video data instead of said demultiplexed video data; and when the decoding by said video decoder is completed within a predetermined time, decoding said demultiplexed video data instead of said spare data by said video decoder to restore the original frame rate of moving video reproduction” as claimed in claim 16 of group IV.

In addition, the moving video decoding apparatus as claimed in claim 10 of group III does not require the features of “a video data storage for storing the video data encoded by the video encoder; a spare-video encoder for encoding video data at a frame rate different from the frame rate of said video encoder; a spare-video-data storage for storing the video data encoded by said spare-video encoder; a synchronization information generator for generating synchronization information for synchronizing the audio data and the video data when multiplexed data is reproduced; a synchronization information storage for storing the synchronization information generated by said synchronization information generator; and an audio-video multiplexer for multiplexing the audio data stored in said audio data storage, the video data stored in said video data storage, the spare video data stored in said spare-video-data storage, and the synchronization information generated by said synchronization information generator” as claimed in claim 1 of group I, “a video data storage for storing video data demultiplexed by said audio-video demultiplexer; a spare-video-data storage for storing the spare

Art Unit: 2621

video data demultiplexed by said audio-video demultiplexer; a synchronization information storage for storing the synchronization information demultiplexed by said audio-video demultiplexer; an audio decoder for decoding said audio data; a video selector for selecting either said video data or said spare-video-data to be decoded; a video decoder for decoding the video data selected by said video selector; and a synchronization controller for controlling said audio decoder, said video selector, and said video decoder according to said synchronization information to reproduce the multiplexed data” as claimed in claim 6 of group II, and “if decoding by said video decoder is not complete in time, decoding by said video decoder the spare video data instead of said demultiplexed video data; and when the decoding by said video decoder is completed within a predetermined time, decoding said demultiplexed video data instead of said spare data by said video decoder to restore the original frame rate of moving video reproduction” as claimed in claim 16 of group IV.

Lastly, the audio-video multiplexed data generating and reproducing system as claimed in claim 16 does not require the features of “a video data storage for storing the video data encoded by the video encoder; a spare-video encoder for encoding video data at a frame rate different from the frame rate of said video encoder; a spare-video-data storage for storing the video data encoded by said spare-video encoder; a synchronization information generator for generating synchronization information for synchronizing the audio data and the video data when multiplexed data is reproduced; a synchronization information storage for storing the synchronization information generated by said synchronization information generator; and an audio-video multiplexer for multiplexing the audio data stored in said audio data storage, the video data stored in said video data storage, the spare video data stored in said spare-video-data

storage, and the synchronization information generated by said synchronization information generator” as claimed in claim 1 of group I, “a video data storage for storing video data demultiplexed by said audio-video demultiplexer; a spare-video-data storage for storing the spare video data demultiplexed by said audio-video demultiplexer; a synchronization information storage for storing the synchronization information demultiplexed by said audio-video demultiplexer; an audio decoder for decoding said audio data; a video selector for selecting either said video data or said spare-video-data to be decoded; a video decoder for decoding the video data selected by said video selector; and a synchronization controller for controlling said audio decoder, said video selector, and said video decoder according to said synchronization information to reproduce the multiplexed data” as claimed in claim 6 of group II, and “a video-decoding-determining module for determining whether or not video decoding is completed within a predetermined time; a color converter for performing color conversion of the decoded data outputted from said video decoder; and a video display for displaying the color-converted data outputted from said color converter; wherein said video decoder omits video decoding according to a predetermined rule to reduce the amount of processing depending on the determination made in said video-decoding-determining module” as claimed in claim 10 of group III.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

4. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HELEN SHIBRU whose telephone number is (571)272-7329. The examiner can normally be reached on M-F, 8:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, THAI Q. TRAN can be reached on (571) 272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/HELEN SHIBRU/
Examiner, Art Unit 2621
June 15, 2008

/Thai Tran/
Supervisory Patent Examiner, Art Unit 2621